JPRS 84029

2 August 1983

Approved for public release;
Distribution Unlimited

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 281

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WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 281

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UNION, GOVERNMENT WRANGLE OVER SETTLEMENT CONTINUES

Union Pressure for Cancellation

Sydney THE SYDNEY MORNING HERALD in English 15 Jun 83 p 11

[Article by Jack Taylor and Andrew Keenan]

[Text] Telecom union leaders will meet senior Federal Government Ministers today to try to persuade them to cancel the Aussat communication satellite.

> The talks coincide with the launching of a \$20,000 publicity campaign by the Australian Telecommunications Em-

> ployees' Association against Aussat.
> The ATEA argues that big media companies will be the major beneficiaries while it will cost the public \$650 million.

The ATEA and other Telecom unions see the Government's decision to give private enterprise 49 per cent equity in Aussat as a breach of its electoral commitment.

The ALP policy declared that there should be a national, publicly-owned and integrated communications system, in-

cluding satellites. It said: "In

communications the principle of public interest must be put before any other consideration such as private gain, whilst recognising that profitability may be necessary to enable the service of the public interest.'

The ACTU and much, but not all, of the union movement, is strongly opposed

to the project and another major row with the Government might be hard to avoid unless it is cancelled.

The ATEA believes that a final decision will be made within four or five weeks and wants to make sure the Government

knows all the facts.

The union's Federal secretary, Mr Bill Mansfield, and president, Mr Col Cooper, will meet the Foreign Minister, Mr Hayden, and the Miniter for Commerce and Industry, Senator Button, today.

Mr Mansfield said yesterday: "We know that the Communication Minister (Mr Duffy) has called for fresh estimates of costs and revenues generated by the satellite.

"And we would hope that when the final figure is determined, he will make it publicly available so the community as a whole can understand what it is letting itself in for.

"We believe that there is no economic or technical justification for the introduction of the satellite at this time. Much more can be saved than has been spent already on this project.'

Meanwhile, questions will be asked at the NSW Labor Council meeting on Thursday about why the council authorised an illustration of Aussat on the front cover of its 1983 directory.

The council supports the ACTU policy opposing the satellite project. It is understood that the publishing company which produced the directory, selected the picture because 1983 is the International Year of Communication. The front cover illustrated the International Year in previous years.

AUSSAT's Position

Sydney THE SYDNEY MORNING HERALD in English 17 Jun 83 p 12

[Text]

CANBERRA. — The Telecom unions' claim that the domestic satellite was a "financial lemon" that would be a drain on Government funds was grossly misleading, according to Aussat, the Government-owned company formed to run the satellite.

Mr Graham Gosewinckel, the general manager of Aussat, yesterday dismissed costings of the project by the Australian Telecommunications Employees'

Association.

He said the satellite would cost \$300 million — not the \$900 million claimed by the ATEA — which was raised mainly through loans by banks provided after an assessment of the project's viability.

Mr Gosewinckel also rejected claims that the satellite would hit Telecom's revenue on its most profitable routes. The satellite would not be able to offer services in areas where Telecom collected more than 90 per cent of its revenue.

ATEA claimed that Government ministers were seriously concerned about the cost of the project

and that it would be stopped.

However, Government sources said yesterday that the satellite was almost certain to go ahead. Not to do so would mean a loss of about \$150 million already spent or committed to the project.

- Richard McGregor

Government's Position

Melbourne THE AGE in English 20 Jun 83 p 3

[Article by Bill Birnbauer]

[Text] The Federal Government is unlikely to go ahead with its decision in principle to sell 49 per cent of the authority controlling the proposed domestic communications satellite, the Minister for Communications, Mr Duffy, said yesterday.

Mr Duffy also said he opposed the previous Government's view that Telecom should not be involved in the operation of a domestic communications satellite. He believed that any service provided by the satellite should be integrated into the Telecom system.

Mr Duffy's comments come at a time when there is increasing pressure by Federal backbenchers to drop the idea of a communications satellite. The backbenchers are concerned that the cost of the project, estimated to be between \$300 million and \$650 million, cannot be justified, and that big media groups would be the main beneficiaries.

The Victorian ALP conference passed a resolution yesterday condemning strongly the announcement in the recent mini-budget that the Federal Government was prepared to sell 49 per cent of its equity in Aussat, the Commonwealth authority set up to launch Australia's first domestic satellite in 1985.

The resolution said that the "share transfer is an ill-advised endorsement of a project that cannot be justified on economic or service grounds". It also called on the Federal Government to abandon the satellite project.

Mr Duffy, who opposed the resolution, told the conference that the Caucus infrastructure committee, which is examining the satellite proposal, had rejected Cabinet's decision to sell a part of Aussat.

"I would think it would be unlikely, if the satellite does proceed, that the sale would be likely to take place," he said. The infrastructure committee decided on 26 May to defer the project until costings by the Department of Finance had been completed.

Mr Duffy said that no decision had been made on the satellite's future and indicated that the decision would be based mainly on the report from the Department of Finance.

The Fraser Government provided for 100 per cent Government ownership of Aussat from 1981-82 to 1985-86. In last year's Budget it announced an intention to sell 49 per cent of its holding to private interests.

The 19 May mini-budget decision to sell 49 per cent of the authority would have netted the Government \$23.3 million next financial year, declining to \$11 million in 1984-85 and \$1.5 million in the satellite's first full year of transmission in 1985-86.

Mr Duffy said it was important for the satellite to be integrated in the Telecom system. "If that is not done, there would be a tremendous danger that if the satellite was not as financially viable as some people make out it would be ... that some of the technology on the satellite would be used as an alternative system to Telecom," he said.

The Federal president of the Australian Telecommunications Employees' Association, Mr Bill Mansfield, told the ALP conference that the original justification for the satellite, that it would provide telephone services to 2000 people and improved television reception to another 200,000 people in remote areas, was a camouflage devised to meet the interests of big media groups.

Mr Mansfield, who estimated the cost of the satellite at more than \$650 million, said the project was opposed by Telecom, the Department of Finance and the Department of the Prime Minister and Cabinet. He warned that the Government would have difficulty in maintaining the loyalty of ALP members if it did not abide by party policy.

"The decision that has been made, which I believe is a decision in principle to sell 49 per cent of the ownership of the satellite, runs 100 per cent counter to our platform in regard to communications," he said. "We are not goint to sit back and see clear commitments in policy simply overriden by decisions made by small numbers of people in Canberra. I hope that message is clearly understood."

Impact on Outback

Canberra THE AUSTRALIAN in English 20 Jun 83 p 16

[Text] STUDENTS in the outback will be among the first to benefit from the launch of Australia's national satellite

system in the second half of 1985.

Aussat Pty Ltd, the company formed to own and

operate the system, has announced it will offer to assist in a full-scale field trial of its capacities in distance education techniques in a remote part of Australia.

Aussat said it would provide a "school-of-the-air" on a satellite, with capacity of about 10 earth stations, and make available technical and engineering support for the duration of the trial.

Over 1000 remote homesteads and communities use school-of-the-air facilities, which allow students to supplement correspondence lessons with class interaction.

"The Department of Communications has been investigating the use of satellites for distance communications," said Aussat's general manager, Mr Graham Gosewinckel.

"Using satellite communications, these students would eventually have access to the same education opportunities as people in cities, many of which we take for granted.

"The system allows students in a wide range of locations to take part in specialised classes and improve the flexibility and quality of courses offered."

Following further discussion with relevant authorities, details of field trials would be confirmed to allow planning to commence in time to meet the 1986 deadline, Mr Gosewinckel said.

In addition to its remote education application, the Aussat system would bring a wide range of benefits to Australians living in remote areas, including ABC radio and television reception, video and data transfer facilities and improved telephone services.

MICROWAVE PROVIDES MODERN PHONE LINKS IN PILBARA

Perth THE WEST AUSTRALIAN in English 9 Jun 83 News of the North p 4

[Text] A NEW microwave link officially opened on May 31, at Dampier, has ensured that the entire Pilbara is serviced by one of the most modern and reliable communication services in the world.

The opening of the \$4 million microwave system between Karratha and Paraburdoo completes the modernisation of Pilbara communications.

The area is now serviced by the latest generation of microwave links and coaxial cable.

The system, linking Karratha, Dampier, Tom Price and Paraburdoo was constructed as a joint venture between Telecom and Hamersley Iron and replaces equipment installed almost 10 years ago.

Joint

It is believed to be the first joint venture between Telecom and another enterprise in Australia. The completion of the link continues development of the Pilbara which has been a Hamersley-Iron hallmark since it began making the modern Pilbara 17 years ago.

The link effectively maintains the close and harmonious working liaison between Telecom and Hamersley established during those early days.

The old link was becoming outdated and overloaded with increasing communications traffic between the mining centres.

The official opening was performed jointly by the managing director of Hamersley Iron, Mr Ian Burston and Telecom's chief engineer in WA, Mr John Huston.

In a ceremony at Dampier, commemora-

tive calls were made to the mine managers at Tom Price and Paraburdoo. At the same time, Mr Burston received a gold-plated key from Telecom, giving the company access to its equipment room at each of the 10 sites along the system.

Mr Huston said the commissioning of the 310km system provided a new era of telecommunications in the Pilbara between Karratha, Tom Price and Paraburdoo.

Consisting of eight repeaters along the route and terminals at each centre, the system had been designed by Telecom engineers to meet the joint requirements of Hamersley Iron Pty Limited and Telecom.

Current generation NEC radio relay equipment had been used to provide a highly reliable, fully protected communications system with a nominal capacity of 960 telephone channels. The system's security was achieved by a duplicated protection bearer which remained on standby at all times ready to take over should the main bearer fail.

While on standby, the protection bearer could be used to carry television signals in either direction, he said.

Mr Burston said a segment of the system, equivalent to 60 telephone channels, was allocated exclusively to the company to carry traffic relating to the engineering and operational activities of its railway system.

Train control and telemetry information would be sent to the track from communication centres at Dampier, Tom Price and Paraburdoo. The company had contributed \$1.2m towards the cost of the project.

By using a number of prominent hilltops as repeater sites along

the route, most of the antenna mounting structures are relatively small, self supporting towers. A design technology known as torsionally stabilised

guyed masts it used used at two repeaters where taller structrues (67 and 7 metres) are required. These masts will withstand winds up to 200 kilometres per hour.

Repeater

All repeater sites are supplied with mains power from Hamersley Iron's fail-safe 22,000 volt power line which follows the railway. Three room, air conditioned buildings, provide separate access to Telecom and Hamersley Iron facilities and common power equipment.

Hamersley Iron arranged for the provision of access tracks and power line feeds to the seven main repeater sites.

The planning, design and most of the installation aspects were carried out by Telecom staff. The only exception was the erection of the towers and masts which was done by contract.

The system has been engineered to meet stringent performance requirements. Comprehensive supervisory equipment will continuously monitor all aspects of the system's operation providing displays at the three terminal centres as

well as at Telecom's 24 hour manned control centre in Perth.

High priority attention will be given to any fault which significantly reduces the reliability of the Hamersley Iron circuits as these are vital to the safety of the company's railway operations.

TECHNOLOGICAL ADVANCES BRINGING STAFF CUTS TO TELECOM

Melbourne THE AGE in English 9 Jun 83 p 1

[Article by Paul Robinson]

[Text]

Telecom is preparing to cut staff by more than 2000 to make way for new technology in telephone exchanges around Australia.

Telecom's management yesterday told the Australian Telephone and Phonogram Officers' Association that Telecom planned to cut staff by 2137 by the year 1985.

Telecom has said that staff cuts would be achieved through voluntary retirement programs, natural wastage, "and a range of other things". It has not ruled out retrenchments.

The association is angry at the plan and says it is preparing an industrial campaign to save the jobs of telephonists, who are predominantly female.

Association sources said yesterday that a high percentage of Telecom telephonists were family breadwinners because of high unemployment in country areas.

Calculations by the association of the country areas.

Calculations by the association have suggested that Telecom plans to reduce more staff than 2137. Because of an agreement covering the ratio of partitime to full-time employees, staff cuts could total 2405.

The reductions represent about 3 per cent of Telecom's workforce of 88,000.

An assessment of Telecom oper-

An assessment of Telecom operations has predicted that the proposed cuts could affect more than 800 jobs in NSW, 500 in Victoria, 500 in Queensland, 200 in South Australia, about 80 in Tasmania and a handful in West Australia.

The association does no believe that Telecom can accommodate staff reductions without retrenching workers,

Assolation sources said that a separate plan had been developed by Telecom to compulsorily retire and redeploy large numbers of employees.

The general secretary of the association, Ms Sylvia Hall, yesterday described the planned job losses as "horrific"

losses as "horrific".

The association' Federal council will meet today to consider Telecom's plan.

The cuts in telephonist staff follow Telecom's decision to introduce computerised exchanges to assist telephonists in handling directory-assisted calls.

The system is called DAS-C. One such computer already operates in Melbourne, two operate in WA and another in Sydney.

Communications industry sources said yesterday that Telecom could save up to \$45 million in staff and production costs if plans went through.

MAJOR EXPANSION OF TELECOM MOBILE PHONE SYSTEM READIED

Canberra THE AUSTRALIAN in English 20 Jun 83 p 16

[Text]

TELECOM Australia's Automatic Mobile Telephone network is to be expanded in Sydney and Melbourne and extended to Brisbane, Adelaide and Perth.

NEC Australia has won the contract to supply the necessary equipment — valued at \$11,326,000.

According to Telecom's deputy chief general manager, Mr Jim Smith, the contract involves delivery this year of base station equipment for the capital cities concerned. It also covers the supply of mobile equipment to be installed in motor vehicles and marine craft following the establishment of the base stations.

base stations.

"This will allow for expansion of the system in Sydney and Melbourne and will enable a number of customers to enjoy interim services in Brisbane and Perth before the end of this year.

"Full service will be available in Brisbane, Adelaide and Perth before the end of 1984."

The mobile telephone was a push-button device which provided all the services available to fixed telephone customers, he said.

It also had a number of

It also had a number of special features including visual display of called numbers and an access control lock.

Mr Smith said the contract should help NEC and the sub-contractors who supplied the company maintain employment levels, as well as the eight companies in Sydney and Melbourne which installed equipment in vehicles.

"When the service starts in Brisbane, Perth and Adelaide Telecom will adopt similar arrangements providing additional employment for skilled people in those cities," he said.

Mr Smith said there were more than 2000 automatic mobile telephones in use in Sydney and Melbourne and sales were holding up well despite the recession.

BRIEFS

TV TRANSMITTER SEIZURE--Canberra. -- The Department of Communications has seized two microwave stations owned by the Nine television network. A spokesman for the department alleged yesterday that the stations, at Somersby, New South Wales, and Coolangatta, Queensland, were unlicensed and had been used to transmit programs between Sydney and Brisbane. Under the Wireless and Telegraphy Act, such an offence can incur up to five years' imprisonment and/or \$1000 in fines. The equipment seized last week is believed to be worth about \$20,000. It is owned by QTQ-9 in Brisbane and Kerry Packer's TCN-9 in Sydney. The spokesman said that the department had observed the stations over several weeks and had recorded video of transmissions in breach of the act. It was continuing to observe other stations on the east coast, he said. It is believed that the Nine network has a series of stations between Sydney and Brisbane at intervals of about 50 kilometres. They are used as a standby to transmit programs such as those on Sunday morning when leased time on Telecom bearers expires. A Nine network spokesman said last night that the equipment had not been used contrary to any law. He said the Government and its relevant agencies had been kept informed at all times about the use of the equipment. "We are concerned to recover the equipment seized and have requested the department to return it," he said. [Margot O'Neill] [Text] [Melbourne THE AGE in English 9 Jun 83 p 3]

BRIEFS

PALAPA B-1 SATELLITE--The satellite Palapa B-1, launched on 18 June by the U.S. space shuttle Challenger from Cape Kennedy, Florida, is scheduled to become operative on 31 July 1983. The operation of Palapa B-1 will be marked by redirecting all ground station antennas from Palapa A to Palapa B-1. Thus, television transmissions on Sunday, 31 July, will be utilizing satellite Palapa B-1. A series of [word indistinct] tests are underway to ensure that all ground station antennas are directed toward Palapa B-1. The exercise will be completed on 28 July. By 30 July, the antennas' realignment will have been completed as scheduled, according to sources in the Telecommunications Authority. [Text] [BK131428 Jakarta Domestic Service in Indonesian 23 [as given] GMT 12 Jul 83]

PEACESAT BEAMS SCIENTIFIC, TECHNICAL DATA

Wellington THE EVENING POST in English 23 Jun 83 p 15

[Text]

A new scientific and technical data service which will be beamed to Pacific and later Asian countries through the Peacesat communications satellite network was opened in Wellington this week.

The Asian Pacific Regional Information Network (Aprin) should not only provide rapid service to developing countries but might also ensure continued funding for the beleaguered Peacesat service in New Zealand.

A victim of government spending cuts, the service had its \$20,000 allocation withdrawn last year but later replaced by a "once only" \$9000 allocation from the Minister of Science and Technology.

The money runs out at the end of August, and after that there are no financial guarantees.

Shortcuts

The service has since taken every availale financial shortcut, including dismissing its fulltime terminal manager based at the Wellington Polytechnic and reemploying her on a contract basis. The Peacesat committee has also made representations to 17 US funding agencies.

This week's launch of Aprin was also a seminar attended by scientists from Pacific countries and Australia aimed at establishing the needs of developing countries.

The service is not being beamed to Asian countries yet.

The concept of an Asian-Pacific information service is one supported by the Government, although Aprin's future at this stage will depend largely on the enthusiastic response of Pacific nations, says the international chairman of the Peacesat board, Mr Martin Kimble.

Peacesat involves 15 countries.

The Aprin scheme, which will place no extra cost on Peacesat, is the "Pacific cell" of a broader concept — Unesco's scientific and technological network, Mr Kimble said.

The Peacesat service in New Zealand is used by some 70 organisations and is considered by its supporters as an ideal and cheap way of disseminating information without being subject to bureaucratic delays.

Mr Kimble is critical of government suggestions that a user-pays system should be introduced. The Minister of Science, Dr Shearer, proposed a \$200 charge to be paid by each of the 70 groups.

Saying that the service fell more under the type of work undertaken in Foreign Affairs aid programmes, Mr Kimble added that a userpays system meant groups would have to pay for the privilege of volunteering information to needy countries

He was also of the opinion that such a proposal would be in contravention of the service's non-commercial licence.

The seminar which accompanied this week's launch of the Aprin programme was the first of several which will be held to establish the needs of the Pacific region.

BRIEFS

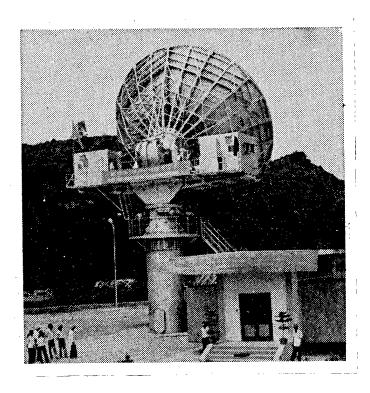
PROGRESS WITH SATELLITE LINK--Work is well under way on the new \$14 million antenna and power equipment at the Earth Satellite Station near Warkworth to bring New Zealand facilities in line with satellite capability. When it is working in December, the existing antenna will be updated. The station manager, Mr P.C. McGechie said: "Our present antenna is 12 years old. But the refit will mean that it also is compatible with the new satellites." Technological advances mean that some 20,000 telephone conversations can now be handled simultaneously through a satellite. "New Zealand may run only some 300 or 400 as a user," said Mr McGechie. "But it will mean we have the capacity, if we need it, for example, at Christmas time." The new structure which has been under construction for a year consists of a power :house, and a circular antenna pedestal with the antenna on top. The transmitting and receiving equipment will be housed in the pedestal. It is basically a duplication of existing facilities but both will be controlled from the present control room. "The weather is holding up three contracts," said Mr McGechie. "But we are still six months off the due completion date--December 16--and should catch up." [Text] [Auckland THE NEW ZEALAND HERALD in English 25 Jun 83 p 12]

CO-OPERATIVE TELECOM LINKS--NZPA--Canberra--Plans by Pacific Island nations co-operatively to improve their telecommunications links will be put to the South Pacific Forum meeting in Canberra in August. Recommendations directed towards overcoming the problems of isolation and distance have been formulated by 12 Pacific Island nations. The Australian Department of Communications, in a publication for World Communications Year, said the recommendations would have far-reaching consequences for the development of the region as a whole. The forum submission follows a detailed study of the islands' telecommunications needs, largely funded by Australia in 1981, and a meeting of South Pacific telecommunications Ministers in Tonga in April this year. The 1981 study followed Australia's refusal to provide services for island countries on the domestic satellite system. The countries were told by the previous Federal Government that their needs would be taken into account in the planning for the second generation satellite. The study, carried out by Telecom, O.T.C. and the New Zealand Post Office, was conducted in Fîji, Kiribati, Nauru, Nuie, the Solomon Islands, Tonga, Tuvalu, Vanuatu, the Federated States of Micronesia, the Cook Islands, Western Samoa and Papua New Guinea. It recommended a balance of satellite and terrestrial services on a country-by-country basis and overall co-ordination of effort between the countries. [Text] [Christchurch THE PRESS in English 30 Jun 83 p 15]

SRV SPACE COMMUNICATIONS STATION

Moscow IZVESTIYA in Russian 27 Jun 83 p 3

[Text]



This space communications station "Intersputnik," built with help of the Soviet Union, is located some 80 kilometers from Hanoi in the vicinity of the provincial city of Phu-ly. It allows the reception in Viet-Nam of direct television transmissions from many points on the planet.

(Moscow IZVESTIYA in Russian 27 June '83 p 1)

GAS PROBLEMS IN TELECOMMUNICATION CABLE DUCTS OUTLINED

Prague TELEKOMUNIKACE in Slovak No 5, 1983 pp 71-72

[Article by Eng Jozef Magdolen, Telecommunication Assembly Enterprise, Bratisla Bratislava: "Gas Hazards in Cable Ducts"]

[Text] With the rapid expansion of the gas distribution system, natural gas sometimes was distributed through old cast-iron pipes, which are not suited for this type of gas. Since the neck and spigot joints for this pipeline type are not welded but only sealed, they allow the relatively dry natural gas to leak. Not being hindered by anything in its way, the gas penetrates into parallel cable ducts, which can be contaminated to a length of several hundred meters, depending on physical conditions. Cable ducts behave as negative pressure gas tanks, frequently functioning as an effective barrier preventing gas from penetrating into buildings' underground spaces. When cable chamber covers are opened, the air flow in the cable duct increases, which makes it easier for gas to fluctuate. The gas hazard rests in the fact that although a zero concentration of natural gas might have been measured in a chamber on its opening, in a few hours gas may be drawn there and explode, often causing serious burns to workers using an open flame and throwing the covers of adjacent cable chambers high in the air, which can seriously injure pedestrians. Injuries caused by exploding gas during maintenance and repair of telephone cables urge us to solve the problems of protecting telecommunication workers. If we conscientiously lend outselves to the task, the injuries can be foreseen and effectively prevented.

Cooperation with gas utilities is necessary if the fight against injuries caused by exploding gas is to be effective. In 1982, the Central Directorate of Telecommunications in Bratislava signed a general agreement of cooperation with the Crude Oil and Gas Industry Concern, according to which the individual telecommunication organizations concerned signed their own specific cooperation agreements with local gas works. In these agreements, the gas works obligated themselves to primarily reconstruct those parts of the gas distribution network where gas leaks into telephone cables. On the other hand, mapping gas leakage helps the gas workers find centers of massive gas leakage.

Basic Data

The lower explosive limit (DMV) is the lowest concentration of inflammable gases or vapors which, when mixed with air, behaves as an explosive. The DMV is different for different explosive gases.

The upper explosive limit (HMV) is the highest concentration of inflammable gases or vapors in air which still makes the mixture explosive. The HMV varies for different explosive gases. A mixture with an explosive gas concentration higher than HMV can easily become explosive when mixed with an appropriate amount of air or other oxidant. The Czechoslovak State Standard CSN 34 1480 gives informative values for some inflammable gases and vapors. Other sources often show DMV and HMV values different from this standard. When in doubt, it is necessary to consider the least favorable data, i.e. the lowest given DMV and the highest HMV.

The explosive limits of a mixture can be informatively calculated from the known explosive limits of individual components according to the relation:

$$L = \frac{100}{\frac{a}{A} + \frac{b}{B} + \dots + \frac{n}{N}}$$

where L ... DMV or HMV of a gas mixture, i.e., volume percents of gases mixed with air, when the concentration reaches either DMV or HMV,

a,b, \dots n \dots volume percentage of the gaseous mixture inflammable components,

A,B, ...N ... DMV or HMV of the gaseous mixture inflammable components.

As an example, we can informatively determine the DMV for natural gas. Natural gas is a nonconstant mixture with approximately 90 percent of methane, ethane, propane, butane or sometimes other hydrocarbons.

Let us assume the following composition:

and an in the

90 percent methane	(DMV 5.2 percent)
6 percent n-ethane	(DMV 3.0 percent)
2.5 percent n-butane	(DMV 1.9 percent)
1.5 percent n-propane	(DMV 2.1 percent)

Then the DMV of natural gas will be informatively:

Since the ratio of the natural gas components' volumes is not constant, most concentration-measuring instruments are calibrated for methane. The calibration can be for absolute volume percents or for DMV percents. Foreign instruments designate DMV as LFL (Lower Flammable Limit), LEL (Lower Explosive Limit) or UEG (Untere Explosions Grenze). If a measuring instrument calibrated for methane DMV percent shows a concentration of, e.g., 75 percent methane, it means that the atmosphere contains 3.9 volume percent methane (if the air contains only methane). It is necessary to realize that measuring natural gas concentration

with an instrument calibrated for methane is not accurate, because the natural gas DMV is lower than the methane DMV. Workers must leave the cable chamber immediately when the methane concentration reaches 20 percent; in this case, the difference between the methane DMV and natural gas DMV is not significant.

There are several methods for measuring methane concentration. The interferometric method is one of the easiest. It is based on the difference between the light-refraction index in clean air and in a methane-air mixture.

Thermochemical methods are based on burning the measured gas. There are essentially two ways to burn gas in a suitable chamber: the measured gas mixture burns on a paltimum fiber under a sufficiently high temperature, or on a layer of a catalyst, which permits using a lower temperature. The fiber is usually connected to one arm of the bridge. A control fiber is connected to the other arm.

Methods using semiconductor detectors (CR detectors) are more sensitive than either the simple or the catalytic-combustion methods.

Infrared spectroscopy and mass spectrometry methods are very exact, however, they cannot be conveniently used outside a laboratory.

Every type of instrument for measuring explosive gases used in the CSSR must be tested by the State Testing Laboratory 214 Ostrava-Radvanice and approved in accordance with Law No 30/1968 of THE LEGAL GAZETTE.

Telecommunications workers use instruments which require manual intake of the measured gas mixture either by a small balloon or an electric exhaust device for every instance of measuring, but also continuous measuring instruments.

The Telecommunication Assembly Enterprise in Bratislava found a Czechoslovak interferometer most useful for discrete measurements. Our interferometer can replace the following pointer instruments: CH4 - a tester manufactured by the Seba Dyvatronic Co (West Germany) and Davis D11 or D15, supplied by Sewerin (also a West German company).

For continuous measuring, the Telecommunication Assembly Enterprise in Bratislava and the entire telecommunication system use the EX-TEC instrument manufactured by Sewerin. Having been calibrated, the instrument flashes and emits a sound signal when the gas concentration reaches 20 percent DMV. The built in rechargeable battery suffices for $8\,\mathrm{hours}$ of continuous operation. The detector is connected with the instrument by a cable 1.2 meters long.

The Warnex B (Exwarn B) instrument manufactured by the Draeger Co (West Germany), one of the most widely known manufacturers of detection instruments for almost 50 toxic or explosive gases, has a sensor built directly into the instrument. This pointer instrument measures concentration within the range of 0 to 50 percent DMV. When a preset level of concentration is reached, (20 percent DMV), the instrument emits strong interrupted optical and acoustic signals.

Another instrument for continuous measuring worth mentioning is a small portable instrument manufactured by the Sieger Co (Great Britain), the 1650 model, which

has been found very effective by the Hungarian Post Administration. The instrument is very convenient for its small weight and size and well-designed shape. Its optical and acoustic alarm signals are particularly convenient for using in cable chambers. However, this instrument has not yet been approved by the Czechoslovak State Testing Laboratory.

Procedures for Measuring Natural Gas Concentration in Cable Chambers

Being lighter than air, natural gas accumulates in the upper part of the cable chamber, especially when the concentration is high. If the concentration is measured by an instrument with an intake hose, it is convenient to push it through the opening in the cover, of if there is no opening, the cover can be slightly lifted, supported, and the intake hose is pushed through the crack which should be as small as possible to prevent gas from leaking into the cable shaft in different ways. Apart from the chamber in which maintenance or repair work is to be performed, it is also necessary to measure the gas concentration at least in the closest chambers in all directions to which the cable leads. Otherwise, after some time, gas could penetrate into the work chamber from adjacent areas, since when the shaft is open, the air flow in the cable increases. Work in the cable chamber should start only when no gas has been detected either in the chamber itself or in other nearby chambers.

Before beginning work, it is necessary to open adjacent chambers in all directions the cable leads. During the entire repair job, workers must follow the Regulations for Safe Work - Part III, Communication Cables, approved by the CSSR minister of telecommunications in 24 May 1979.

Adjacent chambers must be kept open so that natural gas, which may be present in remote parts of the cable duct, will flow toward the open chambers and will escape into the atmosphere.

A cable chamber is considered contaminated if gas has been detected in it, or in at least one of the adjacent chambers. If the contamination is less than 1 percent by volume, it will suffice to open all the adjacent chambers and the work chamber for 1 to 2 hours. It is necessary to measure the concentration once more, immediately before work starts. Workers can enter the chamber only when there is a zero concentration of natural gas in all adjacent chambers and the work chamber. While work is in progress, it is convenient to install under the ceiling an instrument for continuous measuring of natural gas concentration and to preset it for emitting signals when the concentration reaches 20 percent DMV. If such an instrument is not available, the measurements can be performed by an instrument for discrete measurements in at least 30-minute intervals.

When the contamination level ranges between 1 to 4 percent by volume, natural aeration is sufficient in most cases, which is, of course, performed also when the contamination is less than 1 percent by volume. If natural aeration is insufficient, the chamber must be ventilated. Ventilation methods are described below. When a zero concentration of natural gas is reached in all chambers, work may begin, providing an instrument with continuous indication of the natural gas presence is installed under the ceiling, in the upper part of the chamber, and preset for emitting alarm signals when concentration of 20 percent

by volume is reached. If this occurs, the workers must immediately leave the chamber and the chamber must be ventilated.

If contamination exceeds 4 percent by volume, it is necessary to report the presence of gas in writing to the appropriate gas works, which will then perform measurements to determine further steps, or it may assign a specialist to supervise work in the contaminated cable chambers until the gas leak is stopped.

Forced Ventilation of Cable Chambers

Forced ventilation of a chamber where work is being performed requires a specially adjusted cover with an opening and attached fitting suitable for connecting the compressor hose or the neck or sleeve of a powerful fan. The cable duct must remain closed in all the immediately adjacent chambers, while all the second— and third—removed chambers must be opened. If forced ventilation is performed in the vicinity of a telecommunication building to which the cable duct leads, then the openings in the second— and third—removed chambers from the side of the building must be blocked, otherwise gas could be blown into the building. Air is then blown in through the special cover into the cable chamber. If a DK 330 compressor is used at full capacity, the average ventilation time is about 2 hours, if there are about 24 openings in the cable duct and if cables from two directions lead to the shaft and if the mean distance between shafts is not longer than 50 meters. The larger the number of openings, the more directions and the longer the average distance between shafts, the longer the ventilation time.

Using a very powerful fan shortens the ventilation time and makes it more effective both technically and economically. Under the same conditions, the ventilation time can be shortened by a factor of several times, depending on the type of fan.

If using the RNE 250 fan, perfect ventilation takes about 30 minutes, including large redundance, which is, however, appropriate in this case, as well as when a compressor is used. If using a fan, it is important to prevent ignition of the air and gas mixture by the fan's sparks. Therefore, the fan must be situated a safe distance from the chamber and air must be blown into the sleeve before the sleeve is attached to the cable chamber.

Forced ventilation can also be performed by exhausting the gas. This method prevents the hazard of blowing the gas into a telecommunications building, however, it is safe only when approved special explosive-proof exhaust systems are used, otherwise it is risky and, therefore, we cannot recommend it.

After ventilation has been performed, the immediately adjacent chambers should be opened, the second-removed chambers also remain open, but the third-removed chambers must be closed. Safety is improved when air is continuously blown during work. The air flow will be less disturbing to the workers when air is blown through a semi-permeable hose, spread wide around. In a similar manner, air can be blown from the nearest cable chamber via the cable duct.

In emergency cases, when a gas pipe breaks, both ventilation and blowing air into the cable chamber are ineffective. The only solution is the immediate repair of the broken pipe. Work in a contaminated chamber is hazardous even if open flame is not used, explosion can be caused by a spark when a tool falls or from electrostatic flashover etc.

Measuring the gas concentration before entering the cable chamber is a necessary step in all cities with gas lines. Measuring must also be performed in chambers near the chamber where repair work is performed. Measuring instruments must be reliable and precisely calibrated. Using defective instruments or failure to measure gas concentration can have tragic consequences. The best solution is repair of a defective gas pipeline or its replacement. Therefore, cooperation with gas works and constantly pointing out the gas-leak hazard is essential. City authorities and the Work Safety Inspectorate should be notified.

Parallel gas pipelines will continue to present a hazard to cable ducts even in the future and failures will occur due to corrosion, physical damage etc.

The safety of telecommunication workers would improve considerably, if they used instruments for continuous measuring activating an alarm system immediately when a hazardous gas concentration is reached in cable chambers. The use of such an instrument should be incorporated in regulations as mandatory.

In many Czechoslovak towns and cities, there are still city gas distribution systems. Besides the explosion hazard, these systems present the hazard of poisoning by carbon monoxide.

In the vicinity of chemical factories or chemical product distribution systems, other toxic or explosive gases can penetrate into the cable ducts.

In some special instances, even explosive gas generated at waste disposal sites can penetrate into the cable ducts.

9814

SATELLITE COMMUNICATIONS SYSTEM PROJECT PLANNED

Announcement Made

PY100150 Buenos Aires Domestic Service in Spanish 2000 GMT 8 Jul 83

[Text] The project to use a multipurpose domestic satellite as part of a national telecommunications system which would constitute the first step in an Argentine satellite system has been declared of national interest by the executive branch. This announcement was made by the communications secretary, Brigadier General Angel Alejandro Barbieri. The task, which will be undertaken by a special commission formed by members of the Communications Secretariat and the National Commission for Space Research, should be completed before 30 December 1983.

Construction Underway

PY122149 Buenos Aires NOTICIAS ARGENTINAS in Spanish 2001 GMT 11 Jul 83

[Text] Buenos Aires, 11 Jul (NA)--The Air Force, through the National Commission for Space Research (CNIE), will be in charge of the nonterrestrial portion of the future national satellite communications system. This system, which aims at improving communications by means of satellites, has been declared of national interest by the executive branch.

The CNIE will be held responsible for everything having to do with the "space portion" of the system, that is, satellites, rockets and telemetry and control stations.

The Communications Secretariat will be in charge of everything having to do with the "terrestrial portion" of the system, including the commercial exploitation of communications.

The project has been implemented by a commission made up of representatives of the CNIE, of the Communications Secretariat and of the Defense Ministry, under the coordination of the Planning Secretariat.

It was reported that the "domestic communication satellite," construction of which has already been ordered, will permit the easy and low-cost improvement of the existing communications and air traffic control systems. The new system will also improve the performance of telephone, radio, television and computerized communications center services throughout the country. Also, neighboring countries may eventually purchase these services.

GOVERNMENT'S NEW NATIONAL COMPUTER CENTER OPENED

Kingston THE DAILY GLEANER in English 25 Jun 83 p 15

[Text]

The National Computer Centre, which replaced the Government's Central Data Processing Unit, was officially opened on Wednesday evening by the Minister of Public Service, the Hon. J.A.G. Smith.

Sited at 50 Knutsford Boulevard, New Kingston, the \$2-million structure housing the computer centre is a development of Jamaica Property Company Limited, a subsidiary of Pan-Jamaican Investment Trust Limited.

Mr. Smith said that the National Computer Centre was servicing some 50 public sector users and had grown from a staff of 12 to 100 persons. He announced that an IBM central processor was being purchased and should arrive in October to replace the present one.

According to an IBM official, the central processor will be bought from Brazil at a cost of J\$500,000. Other IBM terminals were also expected to fully equip the National Computer Centre, he said.

The Public Service Minister further noted that with the new facility a network control programme would be used for

establishing facilities which would link the centre to other public sector computers utilizing ordinary telephone lines or radio.

He pointed out, however, that because of the grave financial crisis which the country was passing through it was important that the computer centre be fully utilized. This he deemed necessary to avoid a proliferation of underutilized computer services in the public sector. He also pointed to the cost benefit to the nation of a central computer site which would provide ready access to information without duplication of efforts.

The Ministry of Public Service is putting on computer certain information regarding pensions in order to develop an improved system and to eliminate the heavy backlog which existed, the Ministry was also preparing to include information dealt with by the Registrar General concerning births and deaths.

Also present at the brief ceremony was Permanent Secretary, Mr. Gordon Wells, and the Director of the Centre, Mr. Winston Oliver.

GOVERNMENT SUSPENDS RADIO FOR 30 DAYS

PY100112 Asuncion Radio Primero de Marzo in Spanish 1730 GMT 9 Jul 83

[Relayed report by (Yiyo Riveros)]

[Excerpts] We are here at Radio Nanduti which was closed only about 15 minutes ago. At about 1115 a resolution arrived from the Interior Ministry suspending Radio Nanduti broadcasts for 30 days, and exactly at 1155 Radio Nanduti went off the air.

This is the text of the resolution:

Resolution 361, by which the suspension of the broadcasts of Radio Nanduti for 30 days is ordered.

Asuncion, 9 July 1983.

In view of the reports submitted to this ministry by the state security organizations which contain transcriptions of recordings of interviews and commentaries made by Radio Nanduti, and considering that the broadcasts of Radio Nanduti have systematically been disturbing public order and creating social alarm, that radio station has become a mouthpiece through which unscrupulous persons are confusing the public, endangering the political stability of the country and the freedom of expression guaranteed by the Constitution, one of the main objectives of which is sound and constructive criticism, and since it cannot be permitted that this freedom be abused in order to slander persons and institutions, sowing anger among Paraguayans and distorting the true mission of the press, therefore, in accordance with articles 50, 71 and 80 of the Constitution, the interior minister resolves:

Article 1. To order the suspension of the broadcasts on all frequencies of Radio Nanduti for 30 days as of the time of notification of this resolution;

Article 2. To communicate this resolution to the National Telecommunications Administration, ANTELCO, to oversee its fulfillment;

Article 3. It is so ordered.

[Signed] Dr Dario Filartiga, Interior Ministry secretary general; Dr Sabino Augusto Montanaro, interior minister

This is the text of the resolution that arrived at Radio Nanduti at 1115, brought by an officer named (Ojeda), as reported to us at this radio station.

This is all from Radio Nanduti for the Primero de Marzo newscast.

MINISTER TELLS PLANS TO EXPAND TELECOMMUNICATIONS

Dhaka THE BANGLADESH TIMES in English 9 May 83 p 1

[Text] JAMALPUR, May 8--Telephone communications would be expanded for the benefit of common people of the country, this was said by Rear Admiral M. A. Khan, DCMLA and Communication Minister, while inaugurating 600 line autotelephone exchange here today.

He went round various section of the exchange and observed that installation work had been of very high ordered and there has been no complaint since technical commissioning of the exchange some time back. He congratulated the Bangladesh Telephone Shilpa Sangstha for the good works done and said that the T.S.S. will provide many more such exchanges in future.

The factory has been directed to go in for full production of manufacturing automatic telephone exchange for replacement of manual exchanges and new thana exchanges. The DCMLA later addressed a cross section of people at the local town hall. He declared that new exchange will serve a distinction for the need of the people of Jamalpur and will hlep the economic growth of the area.

The DCMLA said that the main objective of the present Martial Law Government under General Ershad is to solve the problem of the commonman of the country.

He assured that the Martial Law Government was pledgebound not to abandone the people unless the problems and difficulties of the people were removed.

He noted some of the pressing demands of the local people and assured that the demands would be met without any further reminder unlike the false promises of the past governments.

He, however, cautioned that Bangladesh was one of the poorest country and the people should keep in mind the hard realities of our resource constraints. He said that it was not possible to build the country without hard work, sacrifice, honesty and integrity and a sense of realism.

He reminded the audience that the political freedom was meaningless without economic liberty. He asked every one to rally round Gen. Ershad's Government and strong support to his 18-point programme for economic salvation.

cso: 5500/7138

BRIEFS

BANGLADESH-BURMA NEWS EXCHANGE--RANGOON, May 13--Information Minister Syed Najmuddin Hashim met the Burmese Minister for Information and Culture U Aung Kyaw Myint here today reports BSS. During the meeting lasting about an hour they discussed the possibilities of new [word illegible] change arrangements between Bangladesh Sangbad Sangstha (BSS) and Burmese News Agency (NAB) the national news agencies of the two countries. The two sides felt that exchange of news was necessary because of the close friendly relation between the two countries The people of both the countries are also keen to know each other At present Burma and Bangladesh are dependent on radio monitoring and foreign news agencies to get news from each other's countries. The two ministers also discussed the possibilities of exchange of radio and television programmes between their two countries. Bangladesh Information Minister informed his Bur mese counterpart that Bangladesh Radio will open Burmese language service. Syed Najmuddin Hashim invited the Burmese Minister for Information and Culture to visit Bangladesh as head of the Burmese cultural delegation which was invited by the Chief Martial Law Administrator Lt. Gen. H. M. Ershad during his two-day goodwill visit to Burma [Dhaka THE BANGLADESH OBSERVER in English 14 May 83 p 1]

AIRPORT RADIO TRANSMITTERS--New radio transmitters for Dhaka International Airport supplied by the UK firm, Rediffusion Radio Systems, will establish direct links with Calcutta and Rangoon, and provide navigational information for aircraft overflying Bangladesh, reports LPS. The order, worth around £250,000, was placed by Bangladesh's Civil Aviation authority through the British Crown Agents. Six of the company's new T1015 fully solid-state transmitters have now been suppplied to Dhaka International. Before they are installed, Bangladesh operating and maintenance staff will spend two to four weeks learning how to use the equipment at Rediffusion's London works. The system will be operational within the next two months. The T1015 transmitter avoids the use of "lifted" components such as valves, so that no warm-up period is required. It has an independent sideband facility, so that it can transmit voice and teleprinter data simultaneously over the same frequency. [Dhaka THE NEW NATION in English 22 May 83 p 3]

CHITTAGONG BROADCAST CAPABILITIES IMPROVEMENT--CHITTAGONG, May 22--Upgradation of Chittagong, Centre of Radio Bangladesh from present 10 kilowatt to 100 kilowatt is under active consideration of the Government. This was disclosed by Mr. Enamul Huq Director-General of Radio Bangladesh and Bangladesh Television

at a meeting of cross-section of people at Chittagong Radio Centre on Saturday evening. Mr. Huq disclosed that two more radio centre's one each at Rangamati and Cox's Bazar would soon go into broadcasting. Each of these centres will have capacity of 20 kilowatt, he added. The Director-General said that while Cox's Bazar centre will cover the coastal areas and off-shore islands the Rangamati centre will bring the tribal people of Chittagong Hill Tracts and Bandarban districts under its purview of broadcasting. Besides Cox's Bazar centre will be able to keep the fishirmen abreast of weather signal during their fishing in the Bay of Bangal. About the development of Chittagong Centre Mr Enamul Huq disclosed a scheme has been taken up for construction of a 400 seat capacity auditorium. He also disclosed that the studios at Chittagong Centre recently renovated and air conditioned. Mr Huq revealed that the remuneration of casual radio artistes have now gone up by 30 per cent. He said that about Taka one crore has been sanstioned for meeting the programme and other costs in the next financial year. The Director-General said that the shortage in number of radio engineers has made difficult maintenance of machinery There are at present 170 posts of radio engineers vacant he added. [Dhaka THE BANGLADESH OBSERVER in English 23 May 83 pp 1, 12]

CHITTAGONG TELEPHONE IMPROVEMENTS--CHITTAGONG, May 23-A new 1,000 lines capacity telephone exchange having nationwide dialling (NWD) facility will go into service in Chittagong from December this year. According to Chittagong telecommunication region office the telephone subscribers of this new exchange will initially be able to dial directly from Chittagong to Khulna Bogra and Dhaka through special codes. The Chittagong telecommunication region office however could not give amount involved in the construction of this new exchange. The National Electric Company of Japan is supervising the construction of this new exchange. With this new exchange the Chittagong city will have six exchanges with a total capacity of 23,680 line telephones. [Dhaka THE BANGLADESH OBSERVER in English 24 May 83 p 1]

cso: 5500/7142

BRIEFS

WEST BANK TELEVISION AD—The Housing Ministry's public service ad that promotes settlement in Judaea and Samaria will remain on the air, but without the musical jingle that has accompanied it. This was decided by the broadcasting authority's board of directors on Monday. Attorney—General Yitzahq Zamir had stated that public service announcements are meant to provide information to the public, and that the airwaves must not be used to spread propaganda or polemics. By that measure, the film itself was acceptable, but the jingle—which maintains that life in Judaea and Samaria is pleasant—was unnecessary. The two Labour Party representatives on the baord had demanded that the ad be withdrawn because it "promotes the political views of the Likud." They also called for ending the ad broadcast on TV declaring that "It's good in Tel Aviv." Yisra'el Peleg and Nisim Almog charged that the ads were politically motivated and financed by the Tourism Ministry to promote the re-election of Mayor Shlomo Lahat of the Likud. [Text] [TA130853 Jerusalem THE JERUSALEM POST in English 13 Jul 83 p 3]

ORBITAL SLOT FOR COMMUNICATIONS SATELLITE--Israel has asked interest, the international organization that decides on slots for space satellites, for a slot to be allocated for Israeli communications. The request was submitted 3 months ago, and there is a waiting period of 4 months from the time of making the request for objections to be heard. Arab countries are opposed to allocating a slot to Israel, on the claim that it would interfere with their frequencies. These details were reported yesterday, 12 July, by Minister of Science and Development Prof Yuval Ne'eman, at the opening of the 17th Congress of motor engineering held in the congress hall of the Tel Aviv Exhibition. Prof Ne'eman said sending up an Israeli satellite would be done through the U.S. space agency (NASA) or a European agency, and that within 10 years Israel would be able to send up satellites by itself. [Text] [TA130948 Tel Aviv HA'ARETZ in Hebrew 13 Jul 83 p 2]

EQUIPMENT FOR DIGITAL TELEPHONE EXCHANGE ARRIVES

Kathmandu THE RISING NEPAL in English 24 Jun 83 pp 1, 8

[Text]

The first consignment of electrical, airconditioning and other equipment for the proposed digital telephone exchange building in Kathmandu has arrived, The eqipment has been purchased from Belgium by Nepal Telecommunications Corporation with the loan assistance from the World Bank.

According to an official of NTC, some equipment will be installed at the new telephone exchange building in Sundhara in Kathmandu and some will be dispatched to Birjung for a new telephone exchange there.

The Sundhara telephone exchange will have a capacity of 5000 telephone lines. Necessary construction work in respect of the building is nearing completion. Installation of the equiment is expected to be completed in another five to six months' time and lines will be distributed by December, NTC officials said.

They said that a second telephone exchange was also under construction in Naxal with a capacity of another 5000 lines. This exchange will be completed by August next year.

Apart from these two exchanges, the NTC is also providing a 1000 line capacity digital telephone exchange in Bhaktapur. Patan will get 1000 more lines to its existing capacity

Under the current third phase of communications development in the country, NTC also envisages to provided digital exchanges at different places. The project will be completed by the end of 1985.

Under this programme, the Corporation proposes to raise the existing capacity of Birgunj telephone exchange to 2000 lines.

Similarly, Hetauda will get 600 additional lines. Banepa 300 more and Bhairahawa 600 additional connections.

Krishnanagar and Taulihawa will also have telephone facilities by 1985. Two new telephone exchanges will be constructed with a capacity of 250 lines each at these centres. This apart, additional lines will also be provided to Butwal (800), Tansen (300), Janakpur (600), Dharan (500), Phokhara (600), and Nepalgunj (500), Biratnagar will have 500 trunk exchange lines.

The Birgunj telephone exchange will be removed to Biratnagar and Birgunj provided with a new digital exchange.

With the installation of digital exchanges at these sites subscribers at any one of these centres would be able to directly dial a number at the other, officials

say.

Meanwhile, according to the Deputy General Manager of the Corporation, Mr Bhupa Raj Pandey. Corporation is also working towards replacing the existing wireless communications system by a microwave link in the rural areas under its rural communications system.

He said that the east west microwave link has been completed and the Corporation has plans to link all the 75 district headquarters and other important points to this system.

Necessary survey has already been conducted by Japanese experts and the report is awaited, he said.

Once the project is completed, Mr. Pandey claimed, even the remote parts of the country world be assured of a more reliable and dependable communications link than at present.

BENIN

BRIEFS

ECOWAS LOAN FOR TELECOMMUNICATIONS LINE—The ECOWAS Fund signed this morning a loan agreement with Benin worth about 193 million CFA francs. This loan will serve to finance the Beninese side of the (?Pakesie-Hertien)-Porga-Fada Ngourma telecommunications line. This line will automatically link Cotonou with Ouagadougou without having to pass through Paris. The agreement was signed this morning in Lome by Robert Tubman, the director general of the ECOWAS Fund and Mr Amoussou Isidore, the Beninese minister of finance. [Text] [AB062105 Lome Domestic Service in French 1900 GMT 6 Jul 83]

FEDERAL MOVES TOWARD ESTABLISHING TECHNOLOGICAL BASE DESCRIBED

Kaduna NEW NIGERIAN in English 21 Jun 83 p 7

[Article by Enyida S. Nwabueze]

[Text]

IN Nigeria, like in any of the Third World nations, there has been a great awakening of interest during the past decade on the glaring importance and the part that science and technology can play in socio-economic transformation of our country. It is as if suddenly everybody woke up to the fact that development, according to Prof. Y. Nayudamma "is development of all resourcefulness; our ability to turn our environment, organization and knowledge into resource, ability to be self-competent, self-reliant, indigenous revitalisation of economic productivity...." has been going the wrong way.

The Federal Government has just demonstrated this realisation by making the study of science and technology a first priority in our educational system, in addition to the long established but seemingly dormant research institutions. Ministry of Science and Technology, etc and the newly established universities of science and technology.

This might be a genuine intent to foster development and industrialization based on the real understanding of our peculiar environment, a realization and understanding

heavy machinery and manpower that have earned the US
and European countries the
tag word "industrialised nations". But the transfer of
techonology today, especially
of our potentialities and arecognition of indigenous
scientific and technical
knowledge with effective interaction with already
established science and
technology of the industrialised nations.

Technology transfer has become our watch-word. Talking about technological "transfer" in Nigeria, one gets the impression that the Federal Government is about to pay an immesurable amount of money for the urgent importation of the

to the Third World, leaves, very much to be desired in terms of direction, costs, restriction on its use, ownership and freedom of choice. Imported technology as a total, turn-key or press-button package, brings along external cultural values, totally alien to the local culture and this brings about changes and attitudes and lifestyles leading to cultural colonization of the receiving country.

TECHNOLOGY

Nigeria's bold but rather bumpy ride towards a meaningful and cultural oriented technological adulthood does not therefore depend principally on the accumulation of

uncensored imported machinery and manpower or the accummulation of patented invention the world over. With the technological reniassance, it is clear that Nigeria hitherto had no industries as a nation. What we had were service stations, workshops, small factories and plants, most of which are assembly plants of imported finished parts e.g. auto and motocycle assembly plants which most of the time are wrongly referred to as "industries".

Unlike Brazil, Nigeria is still very far from having an industrial base to command and tax the attention of the rapidly developing science and technology. An industry is an amalgamation of interrelated but autonomous specialised factories the end product of which is a complex

unit.

It is the opinion of the writer

that, it is with the realisation of all the above that the Federal Government is establishing a machine tools factory in Oshogbo knowing fullly well that machine building is the corner-stone of machinization and industrialization. With machine tools we can build our own tractors for agriculture, industrial machines and equipment, spareparts and even other machine tools. The Federal Government has also

gone further to establish steel companies as a source of raw materials for our budding industries. The steel complex is also supposed to feed our evergrowing building and construction sector and the local steel works in the country. This bold step towards establishing a technological base is a laudable gesture that the Federal Government should be commended.

Due to the technological and industrial barenness of the nation, the writer tends to think that the machine tools factory will end up as these assembly plants of imported finished parts unless the government sets up other technologically interdependent factories.

MATERIALS

Some departments of the machine tooks factory can be fed with the available local raw materials. But for the manufacture of machine tools we need other standardised finished components from other specialised factories or industries like stan-dard electric motors and bearings. Taking into consideration the economic situation of the nation and the urge to set up a tools industry of electric motors and standard bearings imported from the developed countries. If the voice of politics isn't always stronger than our rationale, at least of the existing steel rolling mills should have been a flatsteel mill

TAKE-OFF

It is the suggestion of the writer therefore that if our dream of a technological take-off is to be realised, the federal government should immediately consider setting up a bearing and electric motor factories respectively. These factories viz steel complex, (including flat-steel mill), bearing, electric motor, together with an instruments and tools factory will form an integrated network of industries. Then and only then will our basic technology be born.

With the industrial base, Nigeria can now effectively utilise her indigenous technological manpower reserves, inventions and innovations of her indigenous geniuses. We can then challenge and tax the creativity of our indigenous technicians, scientists and engineers who are presently underutilis-

Furthermore, the government should immediately consider expanding each and every steel mill to include a scrap processing and recyling unit. Presently 95.64 per cent of our natural gas is being flared (New Nigerian Monday 7th. Feb. 1983). We have therefore enough raw material to set up at least one more giant power generating station to take care of the obvious need in electric power in our industrial complex.

NIGERIA TO BUILD THIRD SATELLITE STATION

AB050704 Lagos NAN in English 1751 GMT 4 Jul 83

[Excerpt] Abakaliki (Anambra, 4 Jul (NAN)—The vice president, Dr Alex Ekwueme, said yesterday in Abakaliki, Anambra, that the federal government had approved N186 million for the construction of the third telecommunication satellite station.

Addressing thousands of people at a campaign rally, Dr Ekwueme said that the project would be sited at the Abakaliki senatorial district.

He said that the decision to locate the project in the area was in line with the federal government's policy of ensuring even distribution of amenities.

The vice president assured the people that the project would offer greater job opportunities, when completed.

Dr Ekwueme, NPN presidential running mate, told the rally that the project would make communication with other parts of the country and the world easier and faster.

The vice president called on the people to reject the NPP because of "its false promises and destructive attitude."

He said that it was in the true spirit of peace and unity that President Shehe Shagari's administration made it possible for Christians in the country to receive the pope and the archbishop of Canterbury.

The NPN presidential running mate said that the visits by church leaders had proved wrong the election propaganda of the NPP in 1979, the NPN would convert the people of Islam, if it won the election.

He urged the people to vote massively for the NPN to ensure equitable distribution of amenities.

OPEN LETTER TO INVENTOR OF ASUTECH COMPUTERS PUBLISHED

Lagos BUSINESS TIMES in English 27 Jun 83 p 7

[Letter by I.B. Buhari]

[Text]

TWOULD like to begin this letter by congratulating three persons. Business Times for the exposure given to you and your Asutech Computers in their column of Business and Personality Profile of Business Times of June, 6 1983.

Anambra State University of Technology (Asutech) for establishing Industrial Development Centre, employing such a doyen of Computer design like Prof. Mobisson in the Centre and also for sponsoring such important research, which has culminated into a correctly named "Asutech Computers."

And you, Prof. Mobisson, for blazing the trail in this country's quest for technology acquisition. You not only advanced the theory but have already demonstrated its meaning practically in 'Asutech Computers'. More grease to your elbows. Trio of you.

Prof. this country has witnessed many inventors. From Radio transmission station composing components made of local herbs to not only aeroplane but also solar powered cars. They all came to nought, because this inventors made one simple mistake. They appealed t-o governments for help. No Government (State or Federal) gives that kind of help in this country. That will exterminate kickbacks fro contracts and licenses for the supplies of this materials when they are suc-cessfully manufactured here. Prof. please and please don't make the same mistake. There is a lot of money around to sponsor this project. What is necessary is your determination to see that one day 'Asutech Computers shall be in every house in the world!

When I said there is enough money in austerity striken Nigeria to sponsor your project I'm not joking. Many people

including, you shall soon believe that we need only brains, hardwork, perseverance and honesty to bring, the venture into being. I'm sure we have all these in abundance.

You said in your interview that you need only N3.30 million to establish the venture of producing your baby — Asutech Computers.

This is my formula for raising the fund.

Let the University and you register a public company. The company should not be attached to the apron of any public body. not even Asutech Enugu. It should be a profit oriented venture with independent management in which Asutech like any other person can have shares. I mean this company should not be another Nkalagu Cement Factory, or its likes where board of directors and top management cadre consist of politicians not necessarily of proven ability. The authorised share capital of the company should be N3.30 million

broken into №10.00 worth shares.

Lectures/Symposia should be organised in all Universities and Colleges of Technology in this country on Asutech Computers Asutech Computers Venture. Lectures and proceedings in these symposia should be published and distributed free or sold cheaply so that many members of these institutions should know about Asutech Computers. The sole aim of these lectures and symposia is to get as many members of these academic communities to invest in the venture:

Such lectures and proceeding of the symposia should be carried by all newspapers in this country with advertisement for any member of public wishing to invest in

the venture.

In order to ensure that as many people as possible participate in the venture, people should be allowed to buy any number of shares beginning from one.

I'm sure this formula, if properly applied, by people with more senses than mine, shall soon bring the project into being. In fact I am already dreaming of 'Asutech Computer' in my house and office.

Prof. when next I write you I am sure I shall be writing as a share holder of 'Asutech Computer' Nig. Ltd' or what ever you may call the company.

To demonstrate my belief in this project I pledge to buy six thousand Naira worth of shares of this company purchasable in equal monthly batch in five years!

I wish to end this missive by praising the I n d u s t r i a l Development Centre of Asutech. I'm highly impressed by this epoch making achievement. Thus I pledge N30.00 paltry sum to IDC — Asutech from the end of this month until I die. May IDC — Asutech lead us to the technological era this country yearns for. An era greater than that of Japan, and USA.

Permit me to enjoin other universities and colleges of technology in this country to emulate Asutech. I wish you all the best of iuck Prof. from my heart of hearts.

RADIO TRANSMITTER NEAR ENUGU COMMISSIONED

AB301057 Lagos NAN in English 1029 GMT 30 Jun 83

[Text] Enugu, 29 Jun (NAN)—The Federal Government is determined to bring information to the grassroots in order to educate and unite the nation, the minister of information, Mallam Garba Wushishi, has said.

Mallam Wushishi, who was speaking while commissioning a new Federal Radio Corporation of Nigeria (FRCN) transmitting station at Ugwuaji near Enugu, said that the Federal Government was also determined to ensure that government efforts in all parts of Nigeria were given widest publicity.

The minister said that it has become necessary to do this because some state-owned media of information have determined to black out the activities of federal agencies in the state. He urged radio broadcasters to explain the relevance of government development efforts to the lives of the people of Nigeria.

Mallam Wushishi also enjoined all radio journalists to always appreciate the enormous varieties of ethnic, cultural and geographical characteristics of Nigeria so as to use the radio as a tool for successfully harnessing these diversities with a view to creating a free dynamic Nigeria. He therefore urged FRCN to always be factual since it is now armed with the most sophisticated equipment in the field of radio technology.

The new frequency of 585 kilohertz, 513 meters in the medium wave band can be picked in Anambra, parts of Bendel, Benue, Imo, Cross River and even in Rivers.

SA POISED TO BUY SATELLITE SYSTEM

East London DAILY DISPATCH in English 28 Jun 83 p 13

[Text]

JOHANNESBURG — South African television, as well as the subcontinent's telecommunications network, is poised to leap further in to the space age — probably by courtesy of an American launched satellite system which will be owned by this country.

It could happen within 18 months at a cost of over R250 million. The system will take over from a leased satellite currently being used for international communication purposes. Several countries share the satellite.

- As far as television is concerned, it could mean that the country's much-discussed Channel 4 will come in to operation earlier than anticipated.
- This may also lead to the establishment of a fifth channel specifically designed for educational purposes perhaps beginning in the 1986 scholastic year, informed sources said.
- It could also mean that neighbouring states will be able to lease facilities on the satellites to improve their radio, telephone, television and communications networks.

A spokesman for the Post Office said yesterday that a 10-man committee — chaired by the Deputy Postmaster-General (communications), Mr Rudie Raath, and established by the government — was investigating the purchase of a satellite system.

"No report has been produced since the establishment of the committee," she said.

Mr Raath was reported earlier this year to have said that the country had no "firm commitment" about a satellite system but it is now understood that the committee has been given an urgent brief to find an alternative to maintaining the high cost of a mainly land-based communications network.

Most countries — including struggling Third World countries such as Indonesia, the Philippines and India — have moved ahead of South Africa in the development of space-based systems which acilitate communications and eliminate sabotage, to which the South African network is prone.

The committee first sat in March, and is believed to include representatives of the Defence Force, the South African Broadcasting Corporation, the South African Transport Services and Escom as well as private business interests.

It is understood that

South Africa is looking at the possibility of having three satellites launched at a cost of R250-million. Two of the satellites will provide back-up facilities. They will probably be designed in South Africa and built in the United States.

It is likely they will be launched from an American space shuttle, in much the same way that last week's Challenger flight placed a communications satellite in orbit on behalf of Indonesia.

The advantages of using a communications satellite placed in a statoinary position 36 000 km above the equator are manifold for South Africa's neighbours.

At present, South Africa and Botswana are the only two countries on the sub-continent with functioning earth satellite station facilities. The SA station was originally part of the American deep space tracking facility.

Meanwhile, Mr Eric van der Merwe, a spokesman for the SABC, said yesterday that the corporation had "no comment to make whatsoever" on the possibility of a fourth TV channel.

He added: "Management has informed me that they are not prepared to discuss such a possibility." — DDC

BOPHUTHATSWANA TV TRANSMISSIONS TO BE RESTRICTED

Johannesburg THE STAR in English 4 Jul 83 p 4

[Article by Anthony Duigan]

[Text]

Bophuthatswana television will not have unrestricted transmission to the lucrative PWV area after all. The new service will be confined to areas where Bophuthatswana citizens are concentrated, says the SABC.

At the same time there will be no restrictions

placed on the content of Bop TV programmes and sources at SABC expect the new service to be competitive.

The key to the restrictions under which Bop TV will operate is the technical agreement still to be signed by the two governments.

Under this agreement — due to be ratified soon, it is understood — South Africa will transmit the Bop TV signal to areas where "Bophuthatswana citizens are in large concentrations", said an SABC spokesman.

These areas would include Soweto, other parts of the West Rand and areas north and west of Pretoria.

Technically, it is possible to beam a television signal to specific locations and to exclude all surrounding zones by using a directional aerial—the way SABC will transmit Bop TV in the PWV area.

There has been no suggestion that SABC will use this technical blocking mechanism to restrict the freedom of Bophuthatswana to transmit programmes of its choice.

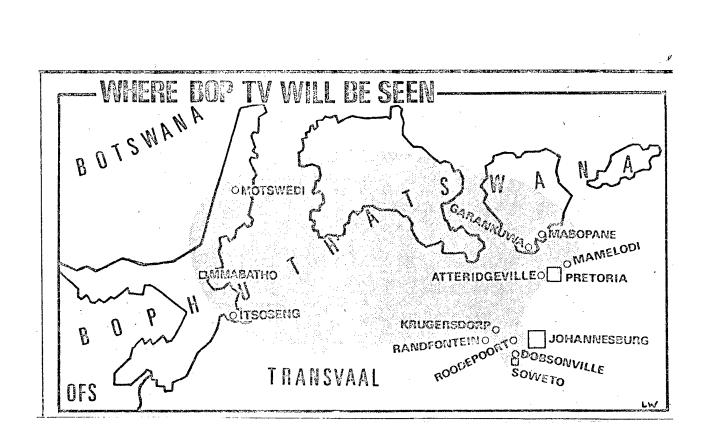
Bophuthatswana is dependent on South Africa for air space because it is not recognised internationally.

Mr Amos Kgomongwe, chairman of the Cabinet Committee for Bop TV, says the South African authorities have undertaken not to interfere in any way with the right of Bophuthatswana to televise what it sees fit to its viewers.

The new service is due to start on January 1 next year. It will be beamed from a transmitter being built at Ga-Rankuwa, north-west of Pretoria, and just inside the Bophuthatswana border.

The Star reported more than three months ago that South Africa was considering putting its own satellite in geostatic orbit 36 000 km above the earth to facilitate communications link-ups throughout the sub-continent.

A technical committee under the chairmanship of Mr Rudie Raath, Deputy Postmaster-General (telecommunications), is investigating this possibility. The satellite would cost R250 million and would link all South Africa's communities in a way which would not be vulnerable to sabotage.



BRIEFS

NO EXTRA TV CHANNELS--Sad as it may seem, no extra television channels are likely to be beamed to the Pretoria-Witwatersrand-Vaal triangle from January 1 next year. Bophuthatswana-TV have yet to build their transmitting tower, and they are still recruiting administration, news, production and advertising staff. Moreover, they have still to sell advertising time and buy, produce and schedule programmes. The SABC with heavy financial backing from the Government, took more than three years to get off the ground and while Bop-TV has its government's backing, it is not clear how much money will be available. The Bophuthatswana government says it will finance the whole operation itself and not allow South Africa's private sector to become involved. Given that Bop-TV will not be on the air next year, it seems unlikely that SABC-TV will begin its proposed fourth channel, as the corporation won't spend one extra cent unless it has competition. It is reported that Bop-TV, when it does go on air, will not have unrestricted transmission to the PWV area. The new service will be confined to areas where Bophuthatswana citizens are concentrated as it appears Bop-TV has reached an agreement with SABC that they won't encroach too much on SABC programmes. Bop-TV will not be able to show programmes controlled by the British Equity union which does not consider Bophuthatswana an inde-[Text] [Johannesburg RAND DAILY MAIL in English pendent country. 5 Jul 83 p 41

MARINE CABLE REPAIRED—The submarine telecommunications cable between South Africa and Europe which had been out of order for more than two weeks has now been restored, the Post Office said in Pretoria yesterday. The cable was damaged by a boat off Ascension Island on June 25. A Post Office spokesman said the circuits which were restored via the communications satellite system had been transferred back to the cable.—Sapa [Text] [Johannesburg THE CITIZEN in English 13 Jul 83 p 12]

CISKEI TV DENIAL--Zwelithsa--The Postmaster-General of Ciskei, Mr J.F. Venter, said yesterday he was not aware that a group of Americans had investigated the possibility of instituting satellite television for Ciskei. He was reacting to a claim by a Port Elizabeth newspaper at the weekend that television viewers in Ciskei might be able to select their programmes from television stations around the world, if tests carried out by the Americans in Bisho were successful. Mr Venter confirmed in a

Press statement that no application had been received by his department for permission to conduct such tests. He said that if such an application was received in the near future, the matter would have to be investigated before any decision could be taken. It was reported that a team from the US had been in Bisho experimenting with satellite reception and the results of its tests had been positive. The report said equipment for domestic use of the commercial system might be marketed in Ciskei by the end of the year. Sapa [Text] [Johannesburg THE CITIZEN in English 13 Jul 83 p 10]

NEW COMMUNICATIONS SYSTEM INDEPENDENT OF RSA

MB071032 Mbabane THE TIMES OF SWAZILAND in English 7 Jul 83 p 1

[By Mandla Magagula]

[Text] The government announced yesterday that Swaziland's telecommunications system will be completely independent of South Africa by the end of this month.

That is when the earth satellite station in the Ezulwini Valley will be launched.

This means the kingdom will be able to communicate directly with overseas countries without going through the Republic of South Africa.

The director of posts and telecommunications, Mr John Sikhondze, told MPS yesterday that the station was ready for operation.

"We will soon be able to communicate direct with the United States and Britain by telex and telephone," Mr Sikhondze said.

He said the station was the backbone of communications services in the country.

"We shall soon be able to watch events in either of the two countries live on our television," Mr Sikhondze said.

"There shall no longer be any need for dependence on South Africa for communicating with these two countries. We shall in due course be linked with other countries both in Africa and abroad."

Mr Sikhondze explained that the department had contributed E250,000 of its own funds for the buildings. The Canadian Government had provided a loan of about 3.5m to buy equipment.

"However, we had to provide a further E500,000 from our own coffers before Canada could give us the money," he said.

The Canadian Government, Mr Sikhondze said, would provide another E800,000 to train Swazis to man the station. Already, he said, nine Swazis had undergone training.

Some Canadian experts would continue training Swazis on the job, he said. The station would use the Atlantic Ocean satellite to beam and receive messages from the United States and Britain, Mr Sikhondze explained.

The main microwave station would be on the Mtondozi Mountains for distributing messages to and from Manzini, Mbabane and other areas.

The land on which the station was built was provided free of charge by the Chief of Ezulwini, Prince Lushawulo. As a gesture of gratitude, Mr Sikhondze said, most of the security and cleaning personnel would be people from the Ezulwini area.

The visiting MPS were shown around the station by the engineer, Mr Richard Mabuza. Earlier, the MPS visited Matsapha Airport to inspect the expansion project.

They were taken on a conducted tour by the acting minister for works, power and communications, Mr Magangeni Magongo.

Mr Magongo later left for Maputo, to attend a meeting of the Southern African Development Co-ordination Committee.

EZULWINI VALLEY EARTHSAT TO OPEN SOON

Mbabane THE TIMES OF SWAZILAND in English 7 Jul 83 p 1

[Article by Mandla Magagula]

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"There shall no longer be any need for dependence on Members of parliament inspect the satellite station yesterday and are given details about its operation by the Director of Posts and Telecommunications, Mr John Sikhondze.

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Mr Magongo later left for Maputo, to attend a meeting of the Southern African Development Co-ordination Committee (SADCC).

ZIMBABWE

BRIEFS

RADIO COVERAGE TO REMOTE AREAS—The Zimbabwe Broadcasting Corporation, ZBC, is extending the coverage of Radio 1 and Radio 4 to more remote areas of the country. Announcing this today, the ZBC director of engineering, Mr (Woodward), said this will be done in the near future. Meanwhile Radios 1 and 4, which were off the air in the Harare area yesterday and this morning due to problems with the mains supply, are now back on the air. The corporation would like to apologize for any inconvenience caused. It is hoped that there will be no recurrence of this in the future. [Text] [MBO81652 Harare Domestic Service in English 1600 GMT 8 Jul 83]

POSTAL MINISTER ON TELECOMMUNICATIONS DEVELOPMENTS

Duesseldorf WIRTSCHAFTSWOCHE in German 10 Jun 83 pp 96-97

[Interview with Postal Minister Christian Schwarz-Schilling: "Development Instead of Strangulation"; date and place not given]

[Text] [Question] Sir, in your support of telecommunications you have made your banner say: as little post office monopoly as possible, as much private enterprise as necessary. The beginning of display text had to be postponed because of software problems at IBM—are you sticking with your creed?

[Answer] You are right in saying that there has been a change in the timing for display text because of these problems of an industrial enterprise. First, all of the decisions in the context of the display text were made by my predecessors. Second, I do not criticize any of these decisions. But I very vehemently criticize the establishment of a particular date.

[Question] But such a determination is important for all of those involved, for equipment producers as well as consumers and those offering information.

[Answer] Only conditionally. In the final analysis, display text does not involve a product that can be produced in series, with clearly defined quality characteristics, but in the broadest sense it is software.

[Question] What is the future of display text?

[Answer] There will be a test run for the Federal Postal Administration at the beginning of next year. After a certain time, those offering information will be included so as to expand the test run; only then will the private participants be included. I assume that this addition of participants will occur in the first half of the year.

[Question] Can, then, the high expectations of the Post Office still be met? One had hoped for about 1 million display-text participants by the end of 1986.

[Answer] It remains to be seen whether that is truly totally realistic and it depends on how this service is accepted. We have taken this magnitude as the basis for our capacity planning. Despite the delayed start, that is

possible for the Postal Service. To a large extent, we have extended the development phase so that we will actually cover the FRG sooner—to about 90 percent. Display text will be available to all participants at the regional or local rate as early as mid-1985 and not the end of 1988 as originally planned.

[Question] What is the reason for this exact scheduling? In case of difficulties, people will pin you down--exactly as they did your predecessor.

[Answer] Precisely this first mishap is now forcing us to take action—that, too, a burden passed on by the last government. In this regard, there is something else that I consider important: the shortened development phase opens up much greater equality of opportunity for the individual competing enterprises. There is, after all, a substantial lessening of the time delay between the inclusion of the individual regions.

[Question] Sir, it was you who said in regard to cabling that you, as it were, build the superhighways; which cars drive on them later is no longer a concern of the Postal Service. Following up on that, in cabling with copper instead of glass fiber, are you not actually building federal roads or country roads?

[Answer] The cited figure of speech comes from a political discussion in the media. Your question refers more to the technology. You are right: the continued interlacing with coaxial copper cables does much to increase the diversity of the media through more radio and television programs. But the planned rapid ISDN [Integrated Services Digital Network] can also be built using copper....

[Question] But the even faster glass-fiber network, which also provides new communications opportunities such as video conferences or image telephone conversations, gets the worst of it.

[Answer] That simply is not true. You know that we have not abandoned the Bigfon experiment but are pushing it with all our might. In addition, as early as last year I gave the glass-fiber industry the long-awaited signal to start production when I guaranteed an annual purchase of 100,000 km for the next 10 years. Contrary to all other interpretations, we are going into glass-fiber technology. But we are entering where it makes sense, that is, in an overlay communications network. It makes no sense to cover the local exchanges with glass-fiber cabling as long as the technical problems—converters, for example—remain unsolved and as long as the price remains so high relative to copper.

[Question] The technical problems are solvable and the price is determined by the quantities produced.

[Answer] Yes. But even if the price approaches that of copper, which may happen by around the end of this decade, we will probably continue to cable the local exchanges with copper—the demand for video conferences, image telephone conversations or extremely rapid data transfer is probably very limited in private households.

[Question] How, then, do you propose to provide these technologies to interested enterprises?

[Answer] Construction of the communications network with glass fiber should begin about 1986. By this time, there will also be satellites in operation, over which data and images and naturally language as well will be transmitted supraregionally. At that time, ground signal stations can be built for those enterprises interested in the new technologies. The inclusion of glass-fiber and satellite communications, then, permits a more rapid satisfying of these industry needs than if we were to provide a complete glass-fiber network down to the local exchanges from the very beginning.

[Question] Mr Schwarz-Schilling, if you can provide a scenario, what is the telecommunications trend in the FRG?

[Answer] We have already checked off some points: by 1986, the FRG will be practically opened up to display text; development of the glass-fiber telecommunications network will begin the same year, provided that industry is then able to deliver. Under no circumstances do we want jobs in Japan but here in this country. In addition, we will integrate satellite technology into the concept as soon as possible; we are initially concerned with leasing satellite channels.

Parallel to that, we are negotiating with German industry for a German telecommunications satellite. The negotiations are now so far along that there is agreement on the price of the telecommunications system. We would like to give final approval within a few days. If all goes well—here, too, I do not wish to commit myself to exact dates—this German telecommunications satellite could begin operation around 1987.

[Question] Its task will be more rapid data transmission, video conferences, more television—this flood of information is not only a technological problem but also a social and psychological problem. For an effective solution, would one not need more profound discussion than has been the case heretofore, with all involved groups participating?

[Answer] In principle, I agree with you. But I personally reject a discussion that assumes that the effects of the new technology can be known today. Today's forecasts are of little value and above all should not stifle every reasonable discussion with ideological narrow-mindedness.

[Question] Then you draw the opposite conclusion: the technologies will be carried out anyway, although the public is not sufficiently informed?

[Answer] That is not right at all: no one, for example, is being forced to participate in the greater diversity of media. But neither do I believe in making alarming scenarios through apodictic and generally very ideologically colored so-called findings, thus hindering all technical progress.

I will do what I can to see that all involved groups come together for permanent discussion to develop new technologies together and to correct together

such technological developments when necessary. In individual cases, that will not be evident until there is some practical experience and cannot be predetermined. But I say again: this discussion must be held constructively, the development must be observed vigilantly and wrong trends must be blocked quickly and effectively—such a discussion should not be for the purpose of throttling the development before it gets started.

9746

NEWSPAPERS WANT TO INTRODUCE LOCAL RADIO BROADCASTING

Helsinki UUSI SUOMI in Finnish 15 Jun 83 p 8

[Text] This summer local newspapers intend to establish 50 local radio stations which they want to run, as far as is known, with the cooperation of businesses, enterprises and counties.

According to the secret communique of the Union of Local Newspapers, only politically neutral media can handle the reporting in a way acceptable to the majority of people.

The communique of the Union of Local Newspapers 16/83 states the following:

To establish local radio companies (confidential);

The membership is to be informed that the administration of the Union of Local Newspapers has already for some time been working on the establishment of local radio stations and a union of local radio stations with the purpose of preserving local views in the air waves. The matter has been worked on confidentially with some leading experts in the country. The matter is now ready for the following measures;

--The member papers of the Union of Local Newspapers (publishers) are urged to consider keeping radio operations, (and later cable TV-operations) under their own control so that immediately and preferably as early as by Midsummer, a corporation that will be engaged in local radio broadcasting will be established or the field of operations of a company that published a local newspaper will be extended so that radio operations will become possible.

--The minimum capital stock is probably enough for the company's capital stock. The publisher of the local newspaper must, either directly or indirectly, hold the majority of the shares. For example, a local organization of enterprisers and/or a regional association or the like could be included. Drafts for the company regulations are available in our union office.

Aim is 50 Companies

--The aim is to establish in our country immediately at least 50 local radio station companies which would all apply for a license from the State Council at the same time in August. This is justified, among other things, by the fact that YLE's (Government-controlled radio) local and regional radio net does not serve all areas.

The matter has also been worked on politically. Locally the matter will be organized so that the company will have an administrative council which is parliamentarily and otherwise balanced.

- -- The expenses of engaging in radio broadcasting are small. They are not an obstacle to any of our members.
- --When companies have been established, Finland's local Radio Broadcasting Union will be founded in August 1983 in which the member newspapers of the Local Newspaper Union will yield power according to the proprietary relationship of member companies.
- --This whole matter will be published in broad outline in the week of Midsummer. The information will be available for the member newspapers. Until then this whole matter will be confidential so that companies can be established in peace.
- --It has also been brought to notice that the recent study tour of the Union of Local Newspapers to Japan concentrated specifically on this question. Experiences obtained there confirm the earlier opinion of the Union that the publishing company of a local newspaper can also successfully engage in radio and TV-operations within the framework of the same or subsidiary company. Only politically neutral media are capable of handling the matter in a way that serves the majority of people. Also with regard to advertising and marketing the matter is fully justified. Good luck for the journey. Additional information upon request.

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cso: 5500/2734

END